WHAT IS CLAIMED IS:

1. A method of controlling the coupling of multi-platform reservoir and network simulators comprising:

synchronizing the advancement through time of the simulators; and

converting the hydrocarbon fluid streams between different sets of pseudo-components used in the simulators.

2. A controller for coupling multi-platform reservoir and network simulators comprising means for synchronizing the advancement through time of the simulators and means for converting the hydrocarbon fluid streams between different sets of pseudo-components used in the simulators.

3. The controller of claim 3 additionally comprising means for applying production and injection constraints.

4. The controller of claim 3 additionally comprising means for balancing reservoir and surface networks.

5. A controller for coupling multi-platform reservoir and network simulators substantially as described herein.